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REMARKS

Claims 14-34 are pending in the present application. Claims 15 and 16 have been cancelled with claims 17-34 newly added by the present amendment. Support for the amendment to claim 14 related to an RNAi agent comprising a dsRNA component is found throughout the specification, e.g., at page 6, lines 14-15. New claims 17-34 are supported throughout the specification, e.g., at page 6, lines 14-20; page 28, lines 22-31 (preparation of an RNAi agent); and original claim 14 (related to inhibiting gene activity).

No new matter is introduced by the amendments.

Specification

The disclosure is objected to because, according to the Office Action, Figure 4A shows eIf2C as SEQ ID NO:5 and the specification states that SEQ ID NO:5 is an amino acid sequence of RDE-4. However, there are no sequences in Figure 4A. Applicants assume that the reference is to Figure 4B. The reference in the specification to SEQ ID NO:5 as representing the amino acid sequence of RDE-4 is correct and is consistent with the description of the drawings (i.e., Figures 10A-10B). The correct SEQ ID NO for eIf2C is SEQ ID NO:10. New drawings are being submitted with the present Response. The new drawing of Fig. 4B indicates the correct SEQ ID NOS for each sequence.

A substitute Sequence Listing and Amendment is being submitted with the present Response. The substitute Sequence Listing corrects inadvertent errors that were made in the originally submitted sequence listing.

35 USC § 112, Second Paragraph

Claims 14-16 are rejected as allegedly indefinite because of insufficient antecedent basis for the term in claim 14 "wherein the dsRNA component." Claims 15 and 16 have been cancelled. Applicants have corrected this by amending claim 14 to provide an antecedent basis for the term. Applicants therefore request withdrawal of the rejection of claims 14-16 under 35 USC § 112, second paragraph.

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35 USC § 102 (b)

Claims 14 and 15 are rejected as allegedly anticipated by Fire et al. (Nature 391:806-811, February 1998). Applicants respectfully disagree with the rejection. Claim 15 has been cancelled.

Claim 14 is drawn to a method of inhibiting the activity of a gene. The method comprises the step of introducing an "RNAi agent" into a cell. The specification describes an RNAi agent as "dsRNAs that have been treated with RNAi pathway components rendering the treated dsRNA capable of activity in the RNAi pathway and can be used as sequence-specific interfering agents useful for targeted genetic interference" (specification at page 28, lines 23-25). An RNAi pathway component is described in the specification (at page 5, lines 9-10) as "a protein or nucleic acid that is involved in promoting dsRNA-mediated genetic interference."

The Office Action states "Fire et al. teaches inhibiting activity of several C. elegans genes by injection of an RNAi agent (dsRNA) (Abstract, Table 1)." (Office Action at page 3, item 9). Although the sequence injected by Fire et al. was a double-stranded RNA (dsRNA) sequence, Fire et al. did not inject an RNAi agent as described in the present invention. The double-stranded RNA used by Fire et al. was not treated with an RNAi pathway component to make an RNAi agent. Therefore, Fire et al. does not introduce an RNAi agent into a cell. Because Fire et al. did not use or contemplate the use of an RNAi agent, Fire et al., does not anticipate claim 14. Applicants therefore request withdrawal of the rejection under 35 USC § 102 (b).

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CONCLUSION

Attached is a marked-up version of the changes being made by the current amendment. Applicants believe that all claims are now in condition for allowance, which action is requested. Enclosed is a \$150.00 check for excess claim fees and a \$200 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing attorney docket no. 07917-105001.

Respectfully submitted,

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Version with markings to show changes made

In the specification:

An amended Sequence Listing and amendment accompany the Response.

In the claims:

Claims 15 and 16 have been cancelled.

Claim 14 has been amended as follows.

14. A method of inhibiting the activity of a gene, the method comprising introducing an RNAi agent into a cell, wherein the RNAi agent comprises a double-stranded RNA (dsRNA) component, and wherein the dsRNA component [of the RNAi agent] is targeted to the gene.

Claims 17-33 have been added.

Drawings

All of the drawings are being replaced by the enclosed formal drawings.